COPYRIGHT 2003 Univentio ANSWER 1 OF 12 PCTFULL 2002090498 PCTFULL ED 20021121 EW 200246 ACCESSION NUMBER: A HIGH THROUGHPUT ASSAY FOR IDENTIFICATION OF GENE TITLE (ENGLISH): EXPRESSION MODIFIERS DOSAGE COMPLET A HAUT RENDEMENT POUR L'IDENTIFICATION TITLE (FRENCH): D'AGENTS MODIFICATEURS D'EXPRESSION GENETIQUE PRUITT, Steven, C., 29 Thistle Lea, Williamsville, New INVENTOR (S): York 14221, US [US, US]; HANGAUER, David, G., 8431 Hidden Oaks Drive, East Amherst, NY 14051, US [US, US]; STEWART, Carleton, C., 30 Carlton Drive, Orchard Park, NY 14127, US [US, US]; MIELNICKI, Lawrence, Mark, 537 Norwood Avenue, No. 1, Buffalo, NY 14222, US [US, US] HEALTH RESEARCH, INC., Roswell Park Cancer Institute PATENT ASSIGNEE(S): Division, Elm and Carlton Streets, Buffalo, NY 14263, US [US, US], for all designates States except US; THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK, State University of New York at Buffalo, Suite 200, UB Commons, 520 Lee Entrance, Amherst, NY 14228, US [US, US], for all designates States except US; PRUITT, Steven, C., 29 Thistle Lea, Williamsville, New York 14221, US [US, US], for US only; HANGAUER, David, G., 8431 Hidden Oaks Drive, East Amherst, NY 14051, US [US, US], for US only; STEWART, Carleton, C., 30 Carlton Drive, Orchard Park, NY 14127, US [US, US], for US only; MIELNICKI, Lawrence, Mark, 537 Norwood Avenue, No. 1, Buffalo, NY 14222, US [US, US], for US only KADLE, Ranjana\$, Hodgson Russ LLP, One M & T Plaza, AGENT: Suite 2000, Buffalo, NY 14203-2391\$, US English LANGUAGE OF FILING: English LANGUAGE OF PUBL .: Patent DOCUMENT TYPE: PATENT INFORMATION: KIND DATE NUMBER _____ WO 2002090498 A2 20021114 DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW RW (ARIPO): AM AZ BY KG KZ MD RU TJ TM RW (EAPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE RW (EPO): ΤŔ BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG RW (OAPI): WO 2002-US14212 A 20020506 APPLICATION INFO .: 20010504 US 2001-60/288,994 PRIORITY INFO.: The present invention provides a method for screening of a large number ABEN of compounds for their ability to modulate the expression of genes. The method uses gene trap technology and comprises the steps of transfecting a population of cells with a gene-trap vector, sorting cells according to their level of fluorescence, distributing sorted cells into pools and expanding the pools to obtain a sufficient number of cells representing each trapped gene to permit distinction of the effect of a test compound over controls, exposing the cells to the test compounds and identifying compounds which alter the fluorescence distribution pattern of cells using FACS analysis. La presente invention concerne un procede de criblage d'un grand nombre ABFR de composes en vue de determiner leur capacite de moduler l'expression

genetique. Le procede utilise la technologie de piegeage de genes et

comporte les etapes de transfection d'une population de cellules au moyen d'un vecteur de piegeage de genes, le tri des cellules selon leur niveau de fluorescence, la distribution des cellules triees en groupes et l'expansion des groupes en vue d'obtenir un nombre suffisant de cellules representant chaque gene piege permettant de distinguer l'effet d'un compose de test sur les temoins, l'exposition des cellules aux composes de test et l'identification des composes qui modifient la configuration de la distribution de la fluorescence des cellules au moyen d'une analyse de trieur de cellules a fluorescence.

ANSWER 2 OF 12 ACCESSION NUMBER:

COPYRIGHT 2003 Univentio PCTFULL 2002040685 PCTFULL ED 20020610 EW 200221 VECTORS FOR CONDITIONAL GENE INACTIVATION

TITLE (ENGLISH): TITLE (FRENCH):

VECTEURS D'INACTIVATION GENIQUE CONDITIONNELLE

INVENTOR(S):

XIN, Hong-Bo, 600 Warren Road, Apt. 5-3E, Ithaca, NY

14850, US [CN, US];

KOTLIKOFF, Michael, 11 The Byway, Ithaca, NY 14850, US

[US, US]

PATENT ASSIGNEE(S):

CORNELL RESEARCH FOUNDATION, INC., 20 Thornewood Drive, Suite 105, Ithaca, NY 14850, US [US, US], for all

designates States except US;

XIN, Hong-Bo, 600 Warren Road, Apt. 5-3E, Ithaca, NY

14850, US [CN, US], for US only; KOTLIKOFF, Michael, 11 The Byway, Ithaca, NY 14850, US

[US, US], for US only

AGENT:

VIKSNINS, Ann, S.\$, Schwegman, Lundberg, Woessner & Kluth, P.O. Box 2938, Minneapolis, MN 55402\$, US

LANGUAGE OF FILING: LANGUAGE OF PUBL.: DOCUMENT TYPE:

English English Patent

PATENT INFORMATION:

KIND DATE NUMBER _____ WO 2002040685 A2 20020523

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (ARIPO):

AM AZ BY KG KZ MD RU TJ TM

RW (EAPO): RW (EPO):

AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

TR

RW (OAPI):

BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.:

WO 2001-US43916 A 20011116

PRIORITY INFO.:

20001116 US 2000-60/249,200

A method of preparing gene trapping libraries, and gene targeted cells AREN for conditional inactivation

of genes, is provided.

L'invention concerne un procede permettant la preparation d'une ABFR banque destinee au piegeage de genes ainsi que des cellules modifiees par ciblage genique permettant l'inactivation conditionnelle de genes.

ANSWER 3 OF 12

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ACCESSION NUMBER:

2001029208 PCTFULL ED 20020820

TITLE (ENGLISH):

CONDITIONAL GENE TRAPPING CONSTRUCT FOR THE DISRUPTION

OF GENES

TITLE (FRENCH):

CONSTRUCTION DE PIEGEAGE DE GENES CONDITIONNEL POUR LA .

DISRUPTION GENETIQUE

INVENTOR(S):

KUeHN, Ralf; VON MELCHENER, Harald; ALTSCHMIED, Joachim

PATENT ASSIGNEE(S):

ARTEMIS PHARMACEUTICALS GMBH; FRANKGEN BIOTECHNOLOGIE AG;

KUeHN, Ralf;

VON MELCHENER, Harald; ALTSCHMIED, Joachim

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER KIND DATE WO 2001029208 A1 20010426

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG

CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:

WO 2000-EP10162 A 20001016 EP 1999-99120592.3 19991016 US 1999-60/162,016 19991027

PRIORITY INFO.:

The present invention relates to a gene trapping construct which causes conditional mutations in genes, and the use of this gene trapping construct to mutationally inactivate all cellular genes. In addition the invention relates to a cell, preferably a mammalian cell which contains the above mentioned construct. Moreover, the invention relates to the use of said cell for identification and/or isolation of genes and for the creation of transgenic organisms to study gene function at various developmental stages, including the adult. In conclusion, the present invention provides a process which enables a temporally and/or spatially restricted inactivation of all genes that constitute a living organism.

ABFR

L14

ANSWER 4 OF 12 PCTFULL COPYRIGHT 2003 Univentio

ACCESSION NUMBER: 2000056874 PCTFULL ED 20020515
TITLE (ENGLISH): RETROVIRAL VECTORS AND METHODS FOR PRODUCTION AND USE

THEREOF

TITLE (FRENCH):

VECTEURS RETROVIRAUX, LEURS PROCEDES DE PRODUCTION ET

LEUR UTILISATION

INVENTOR(S):

HOPKINS, Nancy; CHEN, Wenbiao; BURGESS, Shawn; AMSTERDAM, Adam

PATENT ASSIGNEE(S):

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND DATE

WO 2000056874 A1 20000928

DESIGNATED STATES

W:

AU CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC

NL PT SE

APPLICATION INFO.: WO 2000-US/841 A 2011

DETORITY INFO.: US 1999-60/126,123 19990325

US 1999-60/126 and reagents for it

The invention features methods and reagents for introducing a mutation into a gene in a cell.

The method includes contacting the cell with a recombinant retrovirus

including: (i) branch-point

sequence; (ii) a polypyrimidine tract; (iii) a splice acceptor; (iv) a splice donor; and (v) viral

long-terminal repeats, wherein the splice acceptor and the splice donor flank nucleic acid sequence

encoding a stop codon that is in frame with the splice acceptor; and allowing the retrovirus to

integrate into a gene of the cell. Integration of the retrovirus into the gene introduces a mutation

into the gene.

ABFR L'invention concerne des procedes et des reactifs servant a introduire une mutation dans un

gene d'une cellule. Ces procedes consistent a mettre en contact la cellule avec un retrovirus

recombine comprenant (I) une sequence de point de bifurcation; (ii) une partie polypyrimidine; (iii)

un accepteur d'epissage; (iv) un donneur d'epissage; et (b) une longue repetition terminale virale,

l'accepteur et le donneur d'epissage flanquant une sequence d'acide nucleique qui code un codon

d'arret situe a l'interieur d'un cadre avec l'accepteur d'epissage. Ces procedes consistent

egalement a permettre l'integration du retrovirus dans un gene de la cellule, cette operation

entrainant une mutation dans le gene.

L14 ANSWER 5 OF 12 PCTFULL COPYRIGHT 2003 Univentio

ACCESSION NUMBER: 2000009681 PCTFULL ED 20020515

TITLE (ENGLISH): CONSTRUCTION OF NORMALIZED CDNA LIBRARIES FROM

EUCARYOTIC CELLS

TITLE (FRENCH): CONSTRUCTION DE BIBLIOTHEQUES D'ADNC NORMALISEES A

PARTIR DE CELLULES EUCARYOTES

INVENTOR(S):
NEHLS, Michael;

ZAMBROWICZ, Brian; FRIEDRICH, Glenn; RULEY, H., Earl; SANDS, Arthur, T.; WATTLER, Sigrid

PATENT ASSIGNEE(S):

LEXICON GENETICS INCORPORATED

LANGUAGE OF PUBL.: DOCUMENT TYPE: English Patent

PATENT INFORMATION:

DESIGNATED STATES

W:

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 1999-US17945 A 19990810 PRIORITY INFO.: US 1998-60/095,989 19980810

ABEN A new technology is described that allows for the rapid and efficient construction of complex

cDNA libraries from cultured eukaryotic cells. The technology exploits eukaryotic biology by using

transgenic constructs that have been nonspecifically inserted into the genome to facilitate the

expression of nuclear genes as fusion transcripts. The invention further allows one to specifically

subclone the corresponding fusion transcripts into highly complex cDNA libraries. The libraries are

can be directly sequenced to generate a sequence database of the cellular portion of the fusion

transcripts.

L'invention concerne une nouvelle technologie permettant la construction ABFR rapide et efficace de bibliotheques d'ADNc complexes, a partir de cellules eucaryotes cultivees. Cette technologie exploite la biologie euraryote au moyen de constructions transgeniques qui n'ont pas ete specifiquement inserees dans le genome, afin de faciliter l'expression des genes nucleaires comme transcrits de fusion. L'invention permet egalement de sous-cloner specifiquement les transcrits de fusion correspondants en bibliotheques d'ADNc tres complexes. Ces bibliotheques sont facilement caracterisees par des techniques d'analyse moleculaire telles que l'hybridation, et des clones individuels peuvent etre directement sequences, afin de produire une base de donnees de sequences de

PCTFULL COPYRIGHT 2003 Univentio ANSWER 6 OF 12 L14

la partie cellulaire des transcrits de fusion.

ACCESSION NUMBER:

1999043848 PCTFULL ED 20020515

TITLE (ENGLISH):

PROTEIN INTERACTION AND TRANSCRIPTION FACTOR TRAP

TITLE (FRENCH):

DETECTION DE L'INTERACTION DE PROTEINES ET PIEGEAGE DU

FACTEUR DE TRANSCRIPTION

INVENTOR(S):

ONG, Christopher, J.;

JIRIK, Frank, R.

PATENT ASSIGNEE(S):

THE UNIVERSITY OF BRITISH COLUMBIA;

ONG, Christopher, J.;

JIRIK, Frank, R.

LANGUAGE OF PUBL.:

French

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

KIND DATE NUMBER -------------------------A1 19990902

WO 9943848

DESIGNATED STATES

W:

CA JP US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC

NL PT SE

APPLICATION INFO.:

PRIORITY INFO.:

WO 1999-CA173 A 19990225 CA 1998-2,224,475 19980225

Methods are provided which make use of a combination of gene trap and ABEN two-hybrid methodologies

for the identification and characterization of unknown genes according to protein-protein

interactions of the gene product or for the identification and characterization of unknown genes

encoding transcriptional activator domains (AD). Interaction of an exon-encoded protein domain with

a known protein, or functioning of the exon-encoded domain as an AD, is detected by reconstituting

the activity of a transcriptional activator. Suitable gene trap vectors are also provided.

L'invention concerne des procedes dans lesquels on utilise une ABFR combinaison de methodes, methode

de piegeage de gene et methode a deux hybrides, pour identifier et caracteriser des genes inconnus

en fonction des interactions proteines/proteines du produit genique, ou pour identifier et

caracteriser des genes inconnus codant des domaines activateurs de transcription. L'interaction

entre un domaine de proteine code par un exon et une proteine connue, ou le fonctionnement du

domaine code par exon en tant que domaine activateur de transcription, sont detectes par

reconstitution de l'activite d'un activateur de transcription. L'invention concerne egalement des vecteurs appropries de piegeage de genes.

L14 ANSWER 7 OF 12 USPATFULL

ACCESSION NUMBER: 2002:294593 USPATFULL

High throughput assay for identification of gene TITLE:

expression modifiers

Pruitt, Steven C., Williamsville, NY, UNITED STATES INVENTOR(S):

Hangauer, David G., East Amherst, NY, UNITED STATES Stewart, Carleton C., Orchard Park, NY, UNITED STATES Mielnicki, Lawrence Mark, Buffalo, NY, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

US 2002164636 A1 20021107 US 2002-139420 A1 20020506 (10)

NUMBER DATE _____

PRIORITY INFORMATION: US 2001-288994P 20010504 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: HODGSON RUSS LLP, SUITE 2000, ONE M & T PLAZA, BUFFALO,

NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 1050

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a method for screening of a large number of compounds for their ability to modulate the expression of genes. The method uses gene trap technology and comprises the steps of transfecting a population of cells with a gene-trap vector, sorting cells according to their level of fluorescence, distributing sorted cells into pools and expanding the pools to obtain a sufficient number of cells representing each trapped gene to permit distinction of the effect of a test compound over controls, exposing the cells to the test compounds and identifying compounds which alter the fluorescence distribution pattern of cells using FACS analysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 8 OF 12 USPATFULL

2002:206117 USPATFULL ACCESSION NUMBER:

Novel human polynucleotides and polypeptides encoded TITLE:

thereby

Nehls, Michael C., Stockdorf, GERMANY, FEDERAL REPUBLIC INVENTOR(S):

Zambrowicz, Brian, The Woodlands, TX, UNITED STATES Sands, Arthur T., The Woodlands, TX, UNITED STATES

NUMBER KIND DATE ______

PATENT INFORMATION: US 2002110809 A1 20020815 APPLICATION INFO.: US 2000-560863 A1 20000428 (9)

NUMBER DATE -----

PRIORITY INFORMATION: US 1999-132408P 19990430 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LEXICON GENETICS INCORPORATED, 8800 TECHNOLOGY FOREST

PLACE, THE WOODLANDS, TX, 77381-1160

NUMBER OF CLAIMS: 13 NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 3615

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Novel human polynucleotides are disclosed that correspond to human gene trapped sequences, or GTSs. The disclosed GTSs are useful for gene discovery and as markers for, inter alia, gene expression analysis, identifying and mapping the coding regions of the mammalian, and particularly human, genome, forensic analysis, and determining the genetic basis of human disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 9 OF 12 USPATFULL

ACCESSION NUMBER: 2002:179239 USPATFULL

TITLE: Novel human polynucleotides and polypeptides encoded

Nehls, Michael C., Stockdorf, GERMANY, FEDERAL REPUBLIC INVENTOR(S):

Zambrowicz, Brian, The Woodlands, TX, UNITED STATES Sands, Arthur T., The Woodlands, TX, UNITED STATES

NUMBER KIND DATE ------US 2002095031 A1 20020718 US 2000-563817 A1 20000503 (9) PATENT INFORMATION: APPLICATION INFO.:

> NUMBER DATE -----

PRIORITY INFORMATION: US 1999-132343P 19990504 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 2616 LEGAL REPRESENTATIVE: Lance K Ishimoto, Lexicon Genetics Incorporated, 4000

LINE COUNT: 3616

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Novel human polynucleotides are disclosed that correspond to human gene trapped sequences, or GTSs. The disclosed GTSs are useful for gene discovery and as markers for, inter alia, gene expression analysis, identifying and mapping the coding regions of the mammalian, and particularly human, genome, forensic analysis, and determining the genetic basis of human disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 10 OF 12 USPATFULL

ACCESSION NUMBER: 2002:38555 USPATFULL

TITLE: Vascular endothelial zinc finger 1 gene and protein and

uses thereof

STUHLMANN, HEIDI, NEW YORK, NY, UNITED STATES INVENTOR (S):

XIONG, JING-WEI, NEW YORK, NY, UNITED STATES TAUBMAN, MARK B., LARCHMONT, NY, UNITED STATES

NUMBER KIND DATE PATENT INFORMATION: US 2002023277 A1 20020221 US 1998-83290 A1 19980522 (9) APPLICATION INFO.:

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BAKER & BOTTS, 30 ROCKEFELLER PLAZA, NEW YORK, NY,

10112

NUMBER OF CLAIMS: 25

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

20 Drawing Page(s)

LINE COUNT:

1416

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to the diagnosis and treatment of vascular disorders, and to assays for the identification of agents which act upon the circulatory system. It is based, at least in part, on the identification of a novel mouse gene, termed Vezf1 (for "Vascular endothelial zinc finger 1"), which is expressed at higher levels during embryonic development of the circulatory system, in damaged blood vessels, and in newly formed blood vessels associated with tumor growth.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 11 OF 12 USPATFULL

2001:233296 USPATFULL ACCESSION NUMBER:

Cell libraries indexed to nucleic acid microarrays TITLE:

Ong, Christopher J., Vancouver, Canada INVENTOR(S):

NUMBER KIND DATE _______ US 2001053524 A1 20011220 US 2001-883745 A1 20010618 PATENT INFORMATION: APPLICATION INFO .: A1 20010618 (9)

> NUMBER DATE ______

PRIORITY INFORMATION: CA 2000-2309371 20000616

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SPECKMAN LAW GROUP, Suite 100, 1501 Western Avenue,

Seattle, WA, 98101

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 810

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides a method for selecting a clone of an ES cell containing a mutation in a gene that is expressed in a test cell comprising: (a) providing cDNA obtained by reverse transcription of mRNA of the test cell; (b) providing a collection of cultured ES cells organized into individual clones, wherein each clone is of an ES cell having a mutation in an exon in its genome, the mutation being in a different exon in cells of different clones; (c) providing an array of different single stranded polynucleotides, the polynucleotides being fragments of exons containing mutations in (b); (d) exposing the cDNA to the array under conditions permitting hybridization of polynucleotides in the array to nucleic acids; (e) detecting hybridization of cDNA to a polynucleotide on the array; and, (f) selecting a clone in the collection from which a hybridizing polynucleotide detected at (c) is an exon fragment. This invention also provides a system for testing expression of a gene in a test cell. Also provided is a preferred exon trap vector for mutating ES cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 12 OF 12 USPATFULL

2001:55700 USPATFULL ACCESSION NUMBER:

Construction of normalized cDNA libraries from TITLE:

eucaryotic cells

Nehls, Michael, The Woodlands, TX, United States INVENTOR(S):

Zambrowicz, Brian, The Woodlands, TX, United States Friedrich, Glenn, The Woodlands, TX, United States

Ruley, H. Earl, Nashville, TN, United States

Sands, Arthur T., The Woodlands, TX, United States Wattler, Sigrid, The Woodlands, TX, United States Lexicon Genetics Incorporated, The Woodlands, TX,

United States (U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: US 1998-95989P 19980810 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Brusca, John S. ASSISTANT EXAMINER: Siu, Stephen

LEGAL REPRESENTATIVE: Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.

NUMBER OF CLAIMS: 9 EXEMPLARY CLAIM: 1

PATENT ASSIGNEE(S):

NUMBER OF DRAWINGS: 19 Drawing Figure(s); 17 Drawing Page(s)

LINE COUNT: 862

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new technology is described that allows for the rapid and efficient construction of complex cDNA libraries from cultured eukaryotic cells. The technology exploits eukaryotic biology by using transgenic constructs that have been nonspecifically inserted into the genome to facilitate the expression of nuclear genes as fusion transcripts. The invention further allows one to specifically subclone the corresponding fusion transcripts into highly complex cDNA libraries. The libraries are easily characterized by molecular analysis techniques such as hybridization, and individual clones can be directly sequenced to generate a sequence database of the cellular portion of the fusion transcripts.